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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,623	09/20/2001	Omar C. Baldonado	24717-708	4307
21971	7590	09/16/2005		
WILSON SONSINI GOODRICH & ROSATI 650 PAGE MILL ROAD PALO ALTO, CA 94304-1050				
			EXAMINER VU, THONG H	
			ART UNIT 2142	PAPER NUMBER

DATE MAILED: 09/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,623

Applicant(s)

BALDONADO ET AL.

Examiner

Thong H. Vu

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6-7/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1. Claims 1-22 are pending.
2. This application claimed benefit of 60/241,450 filed 10/17/2000.
3. Amendments to the specification filed 8/29/05 is recorded.

Response to Arguments

4. Applicant's arguments filed 8/29/05 have been fully considered but they are not persuasive.

A. Applicant argues the prior art does not teach or suggest, in claim 1, "exchange routing parameters"

Examiner points out the prior art taught "the content exchange database can include a content exchange identifier, a content exchange site, a content provider, a content exchange status or any other desired or needed information" [Raciborski, col 7 lines 5-24]. It was clearly that the content exchange database provides the parameters for router, server the needed information for exchange process.

B. Applicant argues the prior art does not teach or suggest, in claim 1, "the process for controlling the distinct subset of networking devices"

Examiner points out the prior art taught "the content controller acquired and retain predetermined content objects and the user subscribed service loads the content objects for content exchanges [Raciborski, col 12 line 57-col 13 line 5]; and the content controller performed processing loops back to retrieve any other missing portions [Raciborski, col 16 lines 47-60, Fig 7A-B].

C. Applicant argues the prior art does not teach or suggest, in claim 1, “a plurality of routing intelligent units that each includes software for controlling a distinct subset of networking devices”

Examiner points out the prior art taught the one or more content exchange 116 connected to one or more origin servers, each server connects to one or more client computers 112 or subset of the networking devices [Raciborski, Fig 1, col 3 lines 5-23] object proxy software [Raciborski, col 3 line 64-col 4 line 10].

D. As per claim 14, Applicant argues the prior art does not teach or suggest “exchanging routing parameters among a plurality of decision makers”

Examiner points out the prior art taught the one or more content exchange 116, or decision makers, exchanges the needed information including status information, loading, capacity, utilization and health [Raciborski, col 3 lines 5-23; col 7 lines 5-40].

E. As per claim 14, Applicant argues the prior art does not teach or suggest “a dedicated mesh”

Examiner points out the prior art taught a peer cache [Farber col 10 lines 53-59] or subset of content exchanges [Raciborski, col 19 lines 55-65] as a dedicated mesh.

The prior art taught all limitations and functions in claim language. Thus the rejection is sustained.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-13 are rejected under 35 U.S.C. 102(e) as anticipated by Raciborski et al [Raciborski 6,658,000 B1].

5. As per claim 1, Raciborski discloses A communications back-channel, for coordinating routing decisions, the communications back channel comprising:

a plurality of networking devices [Raciborski, Internet Fig 1];

a plurality of routing intelligence units (i.e.: BGP), wherein each of the plurality of the plurality of routing intelligence units includes software for controlling a distinct subset of the plurality of networking devices [Raciborski, BGP and subset, col 19 line 55-col 20 line 46], each of the plurality of routing intelligence units further including:

one processes for controlling the distinct subset of networking devices [Raciborski, the content manager, a content controller, col 11 lines 14-24 et seq.]; and

one coordination processes for exchanging routing parameters with the plurality of routing intelligence units [Raciborski, content exchange, col 12 lines 26-39; exchange attributes, col 18 lines 41-65].

6. As per claim 2, Raciborski discloses the one or more processes for controlling the distinct subset of networking devices are Border Gateway Protocol (BGP) sessions [Raciborski, BGP and subset, col 19 line 55-col 20 line 46].

7. As per claim 3, Raciborski discloses each of the routing intelligence units is a route-reflector client.

8. As per claim 4, Raciborski discloses each of the distinct subset of networking devices is a route reflector to the route reflector client [Raciborski, BGP and subset, col 19 line 55-col 20 line 46].

9. As per claim 5, Raciborski discloses the one or more coordination process in each of the routing intelligence units includes BGP sessions [Raciborski, BGP and subset, col 19 line 55-col 20 line 46].

10. As per claim 6, Raciborski discloses the BGP sessions in the one or more coordination processes of each of the routing intelligence units includes: at least one BGP process; and at least one BGP stack, such that the at least one BGP stack exchanges routing parameters between the routing intelligence unit and the at least one BGP process, and the at least one BGP process exchanges routing parameters with the plurality of routing intelligence units [Raciborski, BGP and subset, col 19 line 55-col 20 line 46].

11. As per claim 7, Raciborski discloses the at least one BGP stack is a route reflector client, and the at least one BGP process is a route reflector as inherent feature

of BGP, see Rekhter reference].

12. As per claim 8, Raciborski discloses the routing parameters include local path performance characteristics [Raciborski, a local content catalog, col 8 lines 18-30; content exchange, col 12 lines 26-39; exchange attributes, col 18 lines 41-65].

13. As per claim 9, Raciborski discloses the routing parameters include performance scores for routes [Raciborski, route database, col 5 lines 33-43].

14. As per claim 10, Raciborski discloses the performance scores are exchanged via a Local Preference field [Raciborski, a local content catalog, col 8 lines 18-30].

15. As per claim 11, Raciborski discloses a plurality of communication links directly coupling the plurality of routing intelligence units [Raciborski, directly, col 12 lines 9-25; col 13 lines 33-43; col 18 lines 10-25], wherein the plurality of communication links are dedicated exclusively for exchanging routing parameters between the plurality of routing intelligence units [Raciborski, a local content catalog, col 8 lines 18-30; content exchange, col 12 lines 26-39; exchange attributes, col 18 lines 41-65].

16. As per claim 12, Raciborski discloses the plurality of communication links are at least partially comprised of physical links between the plurality of routing intelligence units [Raciborski, Fig 1].

17. As per claim 13, Raciborski discloses the plurality of communication links are at least partially comprised of logical links between the plurality of routing intelligence units [Raciborski, logical datapaths, col 30 lines 54-63].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-22 are rejected under 35 U.S.C. 103(a) as obvious over Raciborski et al [Raciborski 6,658,000 B1 in view of Farber et al [Farber, 6,185,598 B1].

18. As per claim 14, Raciborski discloses A method of exchanging routing parameters amongst a plurality of decision makers (i.e.: routers), each decision maker controlling a distinct subset of a plurality of routers [Raciborski, routers, col 5 lines 4-12], wherein the plurality of decision makers are in communication via a dedicated mesh, the method comprising:

concurrent with the asserting the first plurality of preferred routes, sending a plurality of local performance scores for the first plurality of routes to the plurality of decision makers via the dedicated mesh (i.e.: Internet) [Raciborski, Internet Fig 1; concurrent connections/links, col 9 lines 33-49; col 10 lines 21-34; col 11 lines 25-37; col 12 lines 27-39].

However Raciborski does not explicitly detail asserting a first plurality of preferred routes for a first plurality of prefixes to the subset of routers;

In the same endeavor, Farber discloses the BGP router table [Farber, col 13 lines 40-53]; reflector mechanism [Farber, col 4 lines 14-28, Fig 1]; subset of Internet [Farber, col 5 lines 40-50]; performance scores [Farber, col 12 lines 52-58]; prefixing a distinct string of HTTP tag [Farber, col 23 lines 25-35]

Therefore it would have been obvious to an ordinary skill in the art at the time the invention was made to incorporate the reflector mechanism, performance scores as taught by Farber into the Raciborski's apparatus in order to utilize the BGP process. Doing so would optimize network resource location and provide the updated routing information to direct traffic over Internet.

19. As per claim 15, Raciborski-Farber disclose receiving a second plurality of routes for a second plurality of prefixes via the dedicated mesh [Farber, prefixing a distinct string of HTTP tag col 23 lines 25-35].

20. As per claims 16,18 Raciborski-Farber disclose receiving a plurality of performance scores for the second plurality of routes [Farber, performance scores col 12 lines 52-58].

21. As per claim 17, Raciborski discloses the plurality of performance scores are included in one or more Local Preferences fields in a BGP feed [Farber, performance

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scores col 12 lines 52-58].

22. As per claim 19, Raciborski-Farber disclose the asserting the first plurality of preferred routes is performed via a BGP feed to the subset of routers as inherent feature of BGP.

23. As per claim 20, Raciborski-Farber disclose the plurality of local performance scores are sent via a BGP feed to the dedicated mesh [Farber, performance scores col 12 lines 52-58].

24. As per claim 21, Raciborski-Farber disclose the plurality of communication links are at least partially comprised of physical links between the plurality of routing intelligence units [Raciborski, Fig 1].

25. As per claim 22, Raciborski-Farber disclose the plurality of communication links are at least partially comprised of logical links between the plurality of routing intelligence units [Raciborski, logical datapaths, col 30 lines 54-63].

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

26. Claims 1-13 are rejected under 35 U.S.C. 102(e) as anticipated by Chen

[6,553,423 B1]

27. As per claim 1, Chen discloses A communications back-channel, for coordinating routing decisions, the communications back channel comprising:

a plurality of networking devices [Chen, Fig 4];

a plurality of routing intelligence units, wherein each of the plurality of the plurality of routing intelligence units includes software for controlling a distinct subset of the plurality of networking devices [Chen, intra domain routers, col 4 lines 5-24]

one processes for controlling the distinct subset of networking devices [Chen, processor, col 4 lines 25-45 Fig 5]; and

one coordination processes for exchanging routing parameters with the plurality of routing intelligence units [Chen, dynamically exchanging or updating routing capabilities between neighboring peer routers, col 3 lines 10-25; software program, col 4 lines 25-45 Fig 5].

28. As per claim 2, Chen discloses the one or more processes for controlling the distinct subset of networking devices are Border Gateway Protocol (BGP) sessions [Chen, BGP Fig 2,4].

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29. As per claim 3, Chen discloses each of the routing intelligence units is a route-reflector client [Chen, BGP Fig 2,4].

30. As per claim 4, Chen discloses each of the distinct subset of networking devices is a route reflector to the route reflector client [Chen, BGP Fig 2,4].

31. As per claim 5, Chen discloses the one or more coordination process in each of the routing intelligence units includes BGP sessions [Chen, BGP Fig 2,4].

32. As per claim 6, Chen discloses the BGP sessions in the one or more coordination processes of each of the routing intelligence units includes: at least one BGP process; and at least one BGP stack, such that the at least one BGP stack exchanges routing parameters between the routing intelligence unit and the at least one BGP process, and the at least one BGP process exchanges routing parameters with the plurality of routing intelligence units [Chen, BGP Fig 2,4].

33. As per claim 7, Chen discloses the at least one BGP stack is a route reflector client, and the at least one BGP process is a route reflector as inherent feature of BGP.

34. As per claim 8, Chen discloses the routing parameters include local path performance characteristics [Chen, path through inter domain routing, col 5 lines 6-18].

35. As per claim 9, Chen discloses the routing parameters include performance scores for routes [Chen, parameters is defined enables a router new capability, col 6 lines 17-30].

36. As per claim 10, Chen discloses the performance scores are exchanged via a Local Preference field [Chen, exchanging routing capabilities, col 6 lines 17-30].

37. As per claim 11, Chen discloses a plurality of communication links directly coupling the plurality of routing intelligence units [Chen, peer connection, col 6 lines 17-30], wherein the plurality of communication links are dedicated exclusively for exchanging routing parameters between the plurality of routing intelligence units [Chen, exchanging routing capabilities, col 6 lines 17-30].

38. As per claim 12, Chen discloses the plurality of communication links are at least partially comprised of physical links between the plurality of routing intelligence units [Chen, Fig 4].

39. As per claim 13, Chen discloses the plurality of communication links are at least partially comprised of logical links between the plurality of routing intelligence units [Chen, exchanging routing capabilities, col 6 lines 17-30].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

40. Claims 14-22 are rejected under 35 U.S.C. 103(a) as obvious over Chen [6,553,423 B1] in view of Farber et al [Farber, 6,185,598 B1].

41. As per claim 14, Chen discloses A method of exchanging routing parameters amongst a plurality of decision makers (i.e.: routers), each decision maker controlling a distinct subset of a plurality of routers [Chen, routers, col 3 lines 10-25], wherein the plurality of decision makers are in communication via a dedicated mesh, the method comprising:

concurrent with the asserting the first plurality of preferred routes, sending a plurality of local performance scores for the first plurality of routes to the plurality of decision makers via the dedicated mesh (i.e.: Internet) [Chen, peer connection, col 6 lines 17-30].

However Chen does not detail "asserting a first plurality of preferred routes for a first plurality of prefixes to the subset of routers";

In the same endeavor, Farber discloses the BGP router table [Farber, col 13 lines 40-53]; reflector mechanism [Farber, col 4 lines 14-28, Fig 1]; subset of Internet [Farber, col 5 lines 40-50]; performance scores [Farber, col 12 lines 52-58]; prefixing a distinct string of HTTP tag [Farber, col 23 lines 25-35]

Therefore it would have been obvious to an ordinary skill in the art at the time the invention was made to incorporate the reflector mechanism, performance scores as taught by Farber into the Chen's apparatus in order to utilize the BGP process. Doing so would optimize network resource location and provide the updated routing information to direct traffic over Internet.

42. As per claim 15, Chen-Farber disclose receiving a second plurality of routes for a second plurality of prefixes via the dedicated mesh [Farber, prefixing a distinct string of HTTP tag col 23 lines 25-35].

43. As per claims 16,18 Chen-Farber disclose receiving a plurality of performance scores for the second plurality of routes [Farber, performance scores col 12 lines 52-58].

44. As per claim 17, Chen discloses the plurality of performance scores are included in one or more Local Preferences fields in a BGP feed [Farber, performance scores col 12 lines 52-58].

45. As per claim 19, Chen-Farber disclose the asserting the first plurality of preferred routes is performed via a BGP feed to the subset of routers as inherent feature of BGP.

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46. As per claim 20, Chen-Farber disclose the plurality of local performance scores are sent via a BGP feed to the dedicated mesh [Farber, performance scores col 12 lines 52-58].

47. As per claim 21, Chen-Farber disclose the plurality of communication links are at least partially comprised of physical links between the plurality of routing intelligence units [Chen, Fig 4].

48. As per claim 22, Chen-Farber disclose the plurality of communication links are at least partially comprised of logical links between the plurality of routing intelligence units [Chen, optimal path, col 4 lines 45-58].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thong Vu*, whose telephone number is (571)-272-3904. The examiner can normally be reached on Monday-Thursday from 8:00AM- 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Andrew Caldwell*, can be reached at (571) 272-3868. The fax number for the organization where this application or proceeding is assigned is 571-273-8300

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Thong Vu
Patent Examiner
Art Unit 2142

